**Laura Rizzo**

**Final Lesson: Snack waste composting**

**Grade 3**

**Duration: 1 week (30 minutes on Day 1, 10-15 minutes per day -Days 2-4, 45 minutes- Day 5)**

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| **Learning Objective** | Students will be able to calculate how many pounds of compostable waste the class collects from our daily snack time in one week.  Students will be able to teach why composting is important to their kindergarten book buddies and collaboratively create a poster |
| **Overview** | Students will figure out how many pounds of waste we can save from going to a landfill each week by composting our snacks each day. Students bring healthy snacks (fruit, dried fruit, veggies) each day. Students will then teach the importance of composting to their kindergarten book buddies, and work together to create a poster to try to get other classes in the school to compost their snack waste. |
| **Teacher**  **Standards** | Domain 3 Instruction  Component 3C Engaging Students in Learning |
| **Student**  **Standards** | K-ESS3-3. Communicate solutions that will reduce the impact of humans on living organisms and non-living things in the local environmentESS3.C: Human Impacts on Earth Systems -Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things.3.OA Represent and solve problems involving multiplication and divisionUse multiplication and division within 100 to solve word problems3.NBT Use place value understanding and properties of operations to perform multi-digit arithmeticFluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction3.MD Solve problems involving measurements and estimation of intervals of time, liquid volumes, and masses of objectsMeasure and estimate liquid volumes and masses of objects |
| **Materials and Resources** | * Gallon size plastic baggie * 4 pound bag of rice (rice was previously used in our math measurement unit) * Scale * Class Snack Composting worksheet * Construction paper (8 ½ x 14) for mini-posters * Colored pencils/crayons/markers |
| **Prior Knowledge** | This lesson will follow a lesson the students will have had about landfills the previous week. Students will now have a basic understanding of what landfills are, and the problems associated with having landfills. Students currently compost their lunch in the cafeteria. |
| **Procedure:** | * We will have a quick review about the problems with so much of our waste going into landfills * I will then tell the students that the average person generates just over 4 pounds of trash per day * Students will have a chance to pick up the rice bag to feel what 4 pounds feels like * Students will then discuss with a partner how to figure out about how much waste/trash the class would produce in one school week, and we would solve together (4 x 30) x 5 * I would tell the students that although they do compost their waste during lunch time, we often just throw our snack waste into the garbage, resulting it ending up in a landfill * I will tell students that we could lessen our waste by composting our snack waste also. * Each day students will collect the class’s snack waste in the plastic bag and weigh it. * Each student will record the weight on their Class Snack Composting worksheet * Two students will be randomly selected each day to bring the waste down to the brown composting bin in the cafeteria * We will repeat this each day Monday – Friday * On Friday, students will add up the weights of our snack waste for the week to get a weekly total * We will discuss the results as a class * Later that afternoon, students will meet with their kindergarten book buddies to tell them about what they learned, and explain to them why it’s important to compost their snack waste * Together book buddy partners will create mini-posters to teach and persuade others in the school to compost their snack waste |
| **Assessment** | * Class Snack Composting worksheet * Posters * Student self-assessment |



**Let’s Compost our Snack Waste Too!**

**Directions: Record the daily weight of our snack waste. Then, add to find our class’s weekly total.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Weekly Total** |
|  |  |  |  |  |  |

**Weekly total equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Work space:**

**Snack Composting Project Self-Assessment**

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| --- | --- | --- | --- | --- |
|  | **4** | **3** | **2** | **1** |
| **Science concepts/**  **Content** | **I fully understood the concept and was able to clearly explain it to my book buddy** | **I mostly understood the concept and was able to explain it to my book buddy** | **I understood some of the concept and explained it to my book buddy** | **I didn’t understand the concept and/or wasn’t able to explain it to my book buddy** |
| **Poster** | **Our poster is neat and clearly shows (using pictures and words) why composting our food waste is important** | **Our poster is neat and shows (using pictures or words) why composting our food waste is important** | **Our poster partially shows why composting our food waste is important** | **Our poster does not show why composting our food waste is important** |